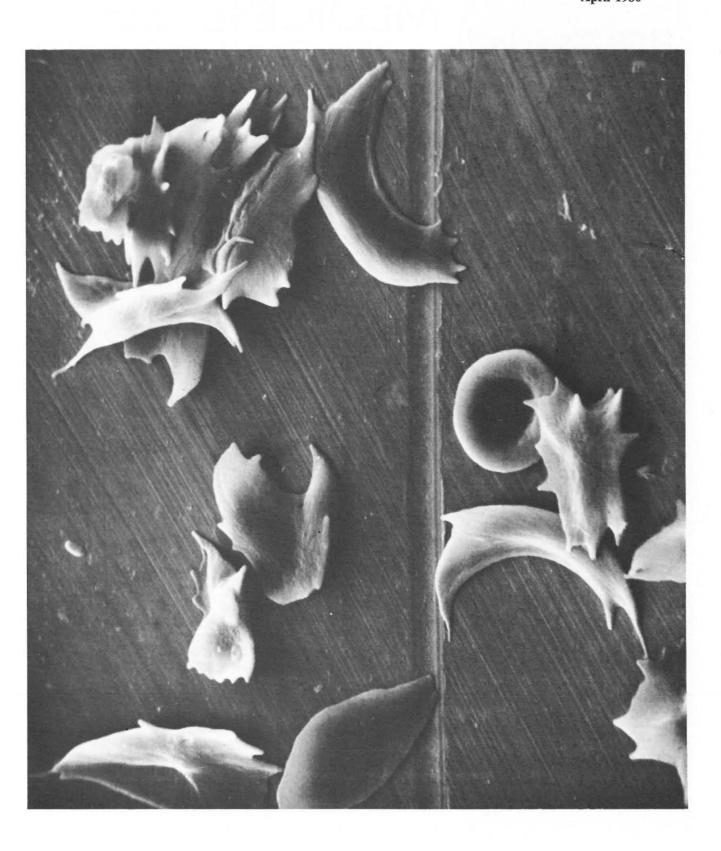
## U. S. NAVY MEDICINE



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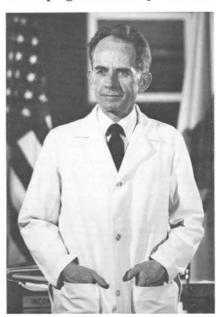
## FROM THE SURGEON GENERAL

## Involvement Requires Communication

From my vantage point, I have had the opportunity to observe the operations of the Navy Medical Department in some detail. Earlier suspicions have been confirmed that, although communication has been emphasized and indeed improved, misperceptions and misunderstandings continue to occur. I would like to share with you my thoughts in one area that has been of long duration, seldom verbalized, but ever present and pervasive in its detrimental effects on our mission.

The Bureau of Medicine and Surgery is our headquarters activity for Navy medicine. Yet I find that except for those who have been assigned to BUMED, very few of our people share a common and accurate knowledge about its purpose and function. The Bureau is comprised of some 400 Navy military members and civilian employees charged with the responsibility for assisting the Chief of the Bureau of Medicine and Surgery in the administration and operation of the Navy Medical Department. This includes policy development, planning and programming for medical support to the operating forces, health care delivery to dependents and other authorized beneficiaries, and the professional development and training of Navy Medical Department members, both active and reserve.

Recognizing the need for a more functional and responsive organization, the Bureau has taken several steps in the past two years to enhance our capability to perform the mission assigned. In 1978, the Office of the Surgeon General (OP-093) was established in the Office of the Chief of Naval Operations. This office provides Navy medicine with a voice in the highest echelons of command to assure proper support for our programs and requirements.



In 1979, the Bureau of Medicine and Surgery was reorganized. The more systematic and effective management of our affairs that this step affords is clearly evident. Our ability to respond to high level tasking has been tested and proved successful. Despite much publicity and discussion, the new organization has been limited in its ability to provide the internal support to the Navy Medical Department that is so

vital to the accomplishment of our mission. Each of us must understand that the Bureau, like our other medical establishments, is a service organization. Policy must be developed, utilizing as a data base a full understanding of the current requirements and problems rather than unfounded or fragmented information. Plans, programs, and developments must address the pertinent issues of both the present and future.

In this regard, you are the eyes and ears, the sensory mechanism. for the Bureau. Communications must flow to us here in Washington so we may evaluate and react to worthwhile information. All too often it is erroneously perceived that BUMED is the mystical body on high that dictates to the medical establishment. We have sought to dispel this through a variety of means, but the real solution lies in your direct involvement through correspondence and communication with those who serve you at this level. The keys to our success are frequent input and valid feedback. Participative management is the critical element. Together, we can and will achieve our goal of quality health care to all of our beneficiar-

W.P. ARENTZEN

N. P. Cerent.

Vice Admiral, Medical Corps United States Navy

## DEPARTMENT ROUNDS

## Three New Flag Officers

The Medical Department has three new flag officers, two from the Medical Corps and one from the Dental Corps.

RADM-selectee Lewis H. Seaton (MC), commander of the Naval Submarine Medical Center, Groton, Conn. since 1977, is a Pennsylvania native. He attended the University of Pittsburgh and received his M.D. degree in 1955.

Dr. Seaton was commissioned and reported to Naval Hospital, San Diego, Calif. for an internship, which he completed in 1956. After receiving training in radiobiology at Reed College and several Federal nuclear facilities, he participated in nuclear weapons testing at the Nevada Test Site in 1957.

Dr. Seaton graduated from Deep Sea Diving School and Submarine School in 1957. His first submarine duty was as squadron medical officer of Submarine Squadron Five. He served on the USS Seadragon and was aboard during its historic polar cruise in August 1960. Assigned to the Navy's first nuclear powered aircraft carrier, USS Enterprise, he returned to submarine duty in 1963 and served successive tours as medical officer of Submarine Flotilla Six and Submarine Squadron Sixteen.

Dr. Seaton completed his ophthalmology residency at NNMC Bethesda, Md. in 1967 and served as chief, Ophthalmology Service and Director of Interns at the Naval Hospital, Jacksonville, Fla. In 1973 he returned to NNMC as Chairman, Department of Ophthalmology.

He is a diplomate of the American Board of Ophthalmology, a fellow of | CAPT Seaton

the American College of Surgeons, and the American Academy of Ophthalmology and Otolaryngology. He has held several offices in the Society of Military Ophthalmologists. He has been Associate Professor of Ophthalmology, George Washington University and Associate Professor of Surgery (Ophthalmology), USUHS.

Dr. Seaton's military awards include the Meritorious Service Medal, Navy Unit Commendation Ribbon, Navy Expeditionary Medal, Armed Forces Expeditionary Medal, and the National Defense Medal.

RADM-selectee William M. Mc-Dermott, Jr. (MC), Commander of NRMC Jacksonville, Fla., was born 24 Sept 1929 in Fitchburg, Mass. He graduated from Tufts University with a B.S. in biology and chemistry. He received an M.S. degree in





CAPT McDermott

physiology from Tufts University and was awarded his M.D. degree from Tufts University School of Medicine. He then completed his pediatric internship at the New England Medical Center, Boston, Mass.

Dr. McDermott entered the Navy in 1963. He has served in various positions including Chief, Pediatric Service, Naval Hospital, Camp Lejeune, N.C. from 1965 to 1967. He then completed residency training in anesthesiology at NNMC Bethesda, Md. From 1969 to 1970. he was Director of Clinical Services and Commanding Officer, 3rd Medical Battalion, 3rd Marine Division, FMF. He then reported to NRMC Portsmouth, Va. as Chairman, Department of Anesthesiology, where he remained until 1973.

Dr. McDermott became Associate Director of the Education and Training Branch at BUMED and was then assigned as Deputy Special Assistant to the Surgeon General in 1975.

The following year he became Special Assistant to the Surgeon General. Dr. McDermott was then assigned as Director of Clinical Services, NRMC San Diego, Calif., and in 1978 assumed command of NRMC Jacksonville, Fla.

Dr. McDermott is a diplomate of the American Board of Anesthesiology and a diplomate of the American Board of Medical Examiners. He was a member of the Lambert-Kingsley Honor Society, Tufts University.

He holds the Bronze Star with Combat V, Meritorious Service Medal, National Defense Medal, Vietnam Service Medal, and Vietnam Campaign Medal.

RADM-selectee Thomas W. Mc-Kean (DC), Commander of NRDC Pensacola, Fla., was born 18 May 1928 in Adams County, Ind. He graduated from Indiana University in 1953 with a D.D.S. degree. He was commissioned as ensign in the Navy Reserve in 1949 and came on



CAPT McKean

active duty during his senior year of dental school.

Dr. McKean's first assignment was at the Naval Training Center, Great Lakes, Ill. followed by a tour aboard USS *Randall* as dental officer. He was then stationed at the Naval Academy, Annapolis, Md. until 1959, when he went to Bermuda with FASRON III.

In 1962, Dr. McKean received postgraduate training at NNMC Bethesda, Md. He had two more years of oral surgery residency at the Naval Hospital, Great Lakes, Ill. From 1966 to 1968, he served aboard USS *America* as dental officer. His next assignment was at the Naval Hospital, Orlando, Fla., where he was Chief of Oral Surgery.

In 1970, Dr. McKean returned to Great Lakes, Ill., where he served as Chief of the Dental Service at the Naval Regional Medical Center. In 1974, he became Chief of the Dental Service, NRMC Oakland, Calif. and assumed his present position at NRDC Pensacola, Fla. in 1978.

Dr. McKean is certified by the American Board of Oral Surgery, is a fellow of the International Association of Oral Surgeons, a member of the American Association of Oral and Maxillofacial Surgeons, Western Society of Oral and Maxillofacial Surgeons, American Dental Association, American Society of Dental Anesthesiology, Florida Society of Oral Surgery, a fellow of the International College of Dentistry, and a fellow of the American Dental Society of Anesthesiology.

He holds the National Defense Medal with bronze star, Naval Occupational Medal, Vietnam Campaign Medal with bronze star, and the Vietnamese Presidential Unit Citation.

## SCHOLAR'S SCUTTLEBUTT

## Servicemen's and Veterans Group Life Insurance

Servicemen's Group Life Insurance (SGLI) offers military personnel up to \$20,000 of group coverage, term life insurance, with no cash, loan, paid-up, or extended insurance value. The \$3.00 monthly premium for this coverage is automatically deducted from your paycheck.

You may decline SGLI coverage, or you may reduce your coverage to \$15,000, \$10,000 or \$5,000 with corresponding reductions in premiums to \$2.25, \$1.50 and \$0.75.

To decline or reduce SGLI coverage, you must fill out VA Form 29-8286 and file it with the disbursing officer at your active duty or active-duty-for training (ACDUTRA) station.

Members of the Naval Reserve who report to ACDUTRA for more than 30 days automatically receive the \$20,000 SGLI coverage. Since Armed Forces Health Professions Scholarship Program students are required by law to spend 45 days each year on ACDUTRA, they are automatically covered under SGLI during their ACDUTRA tour and 120 days beyond. Naval Reserve students in other programs, such as the Dental Student 1925I Program, are also eligible if their ACDUTRA lasts more than 30 days.

After release from ACDUTRA, your SGLI coverage continues for 120 days without any premium charge. You may then extend your coverage by converting to Veterans Group Life Insurance (VGLI). The amount of coverage and the premiums are the same as SGLI, but the method of premium payment is different; also, the length of participation is limited to five years and is nonrenewable.

Students cannot apply for VGLI unless they were previously insured under SGLI. Also, the VGLI policy cannot be for an amount greater than the SGLI coverage. After release from ACDUTRA, you will have 120 days to convert to VGLI without evidence of insurability. Once these 120 days have elapsed, you have an additional year in which to apply for VGLI, but evidence of insurability may be required.

#### HOW TO APPLY FOR VGLI

Within 120 days of release from ACDUTRA:

1) Obtain VA Form 29-8714 (Application for Veterans Group Life Insurance) from any VA office or from OSGLI, 212 Washington St., Newark, N.J. 07102.

2) Mail the complete VA form along with a fully endorsed copy of your ACDUTRA orders and \$3.00 to OSGLI. Upon approval of your application, OSGLI will send you a certificate and supply of monthly premium payment cards. Your subsequent monthly payments will not come due until one month after the 120-day "free premium" period. Arrangements may also be made to pay quarterly, semiannually, or annually.

Within one year after 120 days have elapsed:

- 1) Obtain VA Form 29-8714-2 (Application for Veterans Group Life Insurance—Veterans Separated More Than 120 Days) from any VA office or from OSGLI.
- 2) Follow the same instructions given above. The basic difference between the two forms is inclusion of a health information section on VA 29-8714-2. OSGLI may also request additional medical information or further proof of insurability if warranted by your answers in the health information section.

#### FUTURE ACDUTRA AND ACTIVE DUTY

Although you may carry both VGLI and SGLI, the combined amount of coverage cannot exceed \$20,000. When you report for each tour of ACDUTRA, you are again automatically covered under SGLI and \$3.00 per month will be deducted from your pay. If you wish to stop this deduction, upon reporting for ACDUTRA you must immediately decline SGLI in writing on VA Form 29-8286. Either the personnel office or the disbursing office at your ACDUTRA station will have this form.

You may not cancel your VGLI to take advantage of the 120-day SGLI "free premium" period each time you report for ACDUTRA. However, once you report for extended active duty after graduation, you should cancel your VGLI policy and take SGLI coverage. You will again become eligible for the VGLI five-year non-renewable policy after your release from active duty.



### On Growing Children

### The Child Who Steals

CDR Eli Breger, MC, USNR

"To make your children capable of honesty is the beginning of education." Ruskin

It has long been recognized that the growing child has a natural desire to take and accumulate objects which he wants and have value to him. Parents respond to this behavior with social training regarding property rights. With a child's natural development and maturity there develops a predictable set of inner controls to curb these impulses. This "inner harness" cultivates that portion of his mind called the "conscience" and with time a moral code develops by which to live.

Failures in the development of this mental mechanism are common and well known to parents and others dealing with children. That it is not more widely apparent reflects parental hesitation to openly discuss this socially unacceptable behavior and their attempt to work it out privately. Stealing in childhood can be selective or indiscriminate, occasional or habitual, and perpetrated alone or in a group. Ordinarily, stealing in childhood is not serious when it occurs while the child is acquiring the concept of property rights. If judiciously handled it has no serious consequence. However, as with all "everyday problems of the everyday child," inadequate or inappropriate management may lead to the symptom continuing and it then becomes increasingly difficult to manage.

An effective and intelligent approach depends on knowledge of the psychological issues involved. The mechanisms leading to stealing in childhood are varied and in any given child more than one mechanism can be additively at work.

#### Developing a Sense of Property Rights

To the very young, all the world, including himself, belongs to adults and things that come to him are given by others. With age and increasing motility he learns he can reach out and take things. This brings forth parental responses as to what can and cannot be taken. By age two a child is aware of what he can take based on these parental responses. It takes considerably more training by word as well as by

example to firmly establish this concept. Most often it is well consolidated when a child starts school, although occasional breakdowns may occur.

Although economically and socially disadvantaged families may have the highest of moral and ethical standards, children in such environments do steal more often. Crowded living arrangements, lack of privacy, and a need to share clothing and belongings blur clear boundaries between people and things and markedly hinder the development of a sense of property rights. Additionally, the hardships and burdens of meeting the most essential needs of family life can limit adequate attention being focused on the development of this concept. Where possessions are scarce and joys few, the desire in a child to take something not belonging to him can be very great indeed. Such environments sometimes contain criminal behavior within the parents themselves which the child adopts through modelling. Even if this is absent, when parents are overburdened, the child often is neglected. He may readily fall into a "street gang" subculture from which he receives a sense of identity denied him at home. He steals as part of that culture. Such children are well known to the courts which

Dr. Breger is Chief of the Psychiatry Service at the Naval Hospital Beaufort, S.C. 29902. Copyright 1980 Eli Breger, M.D. All rights reserved. May be reprinted or reproduced within the Navy for nonprofit type educational purposes in keeping with the fair use doctrine.

attempt to help them. Often this necessitates removing them from their environments and placing them in training schools.

Within the more advantaged, educated, and economically stable population, ineffective training may also exist. Unwitting parents insist on their child sharing his prized possessions with siblings so as not to be selfish and thereby discourage his developing a sense of property. Should the child see his parent lack respect for the boundaries and properties of others he may follow suit. A parent sets a bad example by accepting incorrect change in one's favor, bringing home pencils and clips from the office for personal use, opening letters addressed to the children, searching a child's room, or going through trousers or purses to confiscate money. Parents may be quite inconsistent when they instruct a child to respect money belonging to others yet, when he asks for some, they instruct him to go to their purses and take it.

Another common occurrence is a child taking something in a store. The parent finds this cute and condones it or becomes so embarrassed that she covers up by buying the item. Parents often lose the opportunity to focus on "what is thine and what is mine" by admonishing a child for taking something only in terms of "God will punish you." In a society which stimulates children's desires to possess many material items it is impressive how frequently parents neglect to bolster money management by providing the child with allowances and opportunities to earn money.

#### The Role of Peers

Despite adequate training, children frequently begin to steal because of personal emotional problems related to feelings of inade-

quacy in dealing with their own age group. The desire and need for friendship are powerful forces throughout all of childhood. Frequently children will steal money to splurge on items for their friends in a desperate effort to obtain acceptance, approval, and prestige. Most commonly, this occurs in a child with low self-esteem, but occasionally a confident child may so react when he is in surroundings with wealthier children. The insecure youngster brags about what he owns but then has to come up with it to retain his reputation.

Not infrequently, as part of an initiation to gain acceptance into a group, peers will dare a child to steal to prove his courage. This is one of the factors present in shop-lifting by teenage girls and car theft by adolescent boys. If they aren't proving something to their friends they are proving their daring to themselves.

There are children with strong feelings of inferiority based on realistic or imagined weaknesses who may be coerced or tormented by stronger and more aggressive children to steal for them, or else pay the price in physical assault.

Understandably, to effectively help these children, much more is involved than teaching them right from wrong and developing a sense of property rights. In essence, we try to help the child develop greater confidence, support his fragile self-esteem, and help him learn to love himself.

#### The Role of Family Relationships

Stealing frequently reflects a child's vengeful feelings against his parents. He feels they reject him, neglect him, treat him unjustly, or deal with him in an excessively authoritative, punitive, or abusive manner. He steals not for the pleasure of what he will obtain,

which is often insignificant in and of itself, but rather because it will annoy his parents and satisfy his feelings for revenge. Such behavior is likely to spill over into other antiauthoritative directions. It will not be of an open and defiant type but more usually it will be in the direction of concealment or passive resistance. Corrective action depends on careful analysis of the family imbalance. This should include understanding the child's angry feelings, realistically normalizing his environmental condition, and enhancing a better understanding and love among family members.

Childhood stealing commonly reflects compensation for feelings of rejection and lack of love. Here the thrust is not for revenge. It is an unconscious filling up of oneself materially for the absence of parental acceptance and affection. The urge is strong and compulsive; the child feels guilty and yet does not know why he steals. Only intensive therapy can help such children find a way out of their grave emotional conflict and enable them to understand the connection between their compulsive actions and their feelings.

There are children who have never established a sense of basic trust and security with their parents. They lack feelings of affection, are undemonstrative and, along with this, lack feelings of shame and responsibility. These are extremely damaged children who very often have had losses of loved ones or separation from parenting individuals early in their lives. Without this basic love tie, moral and ethical behavior is seriously compromised. These children frequently steal repeatedly, show truancy, often wander aimlessly, and appear destined to a life of crime and delinquency. Aiding such children involves early intervention with careful and skillful environmental planning aimed toward his developing a love tie with some meaningful individual. When treatment is instituted later in life, the outlook is generally quite poor.

#### The Neurologically Handicapped

Children who are mentally retarded and/or brain damaged are more prone to steal. It is not the retardation or neurologic impairment which causes stealing. Rather it is because these factors have seriously impaired their intellectual understanding of property rights and their weak neurologic system makes it more difficult for them to develop self-control. Most children with these problems do not steal because they have had adequate training. Their parents had to work on it more energetically and persistently than for a normal child.

#### **Teenage Regression**

Adolescents who previously controlled their stealing desires may show a tendency to break down and steal again during the early stages of puberty. These incidents are usually of a passing nature and respond to support, reeducation, and time. A relatively new phenomenon relates to widespread drug use among teenagers requiring funds to support the habit. This has increased stealing by adolescents to epidemic proportions and is a problem requiring the attention and cooperation of many segments of society.

Be mindful that even under the variety of circumstances described above it is only the occasional child who steals habitually. The symptom should be viewed as an individual and specific reaction to the child's unique and complex life situation.

"The parent's life is the child's copybook." Partridge □

## Contact Point Management: How Do You Rate?

LCDR W.F. Leadbeater, MSC, USN LT H.C. Coffey, MSC, USN

A mother of three children approached the Medical Records Office to request the clinical record for her oldest daughter, who had just received a walk-in pediatric appointment. The records clerk, after retrieving the record, noticed that it was the child's birthday. She quickly summoned two other people in the office, and they sang "Happy Birthday" to her. The child, as feverish as she was, broke into smiles. Other people in the area applauded, and work went on as usual.

At the same medical center, a mother of two very young children was in tears because she was being denied treatment. She had arrived five minutes late for her appointment to have a pap smear retaken. Although she had travelled an hour from home, leaving her newborn daughter and 16-month-old son with a babysitter, and although there was only one other patient waiting to be seen, the 5-minute rule was going to be enforced!

These two incidents are actual. They could be repeated at any medical facility on any day. Although they are extreme examples of how patients can be treated, they demonstrate the effect that a staff member can have on a person entering our health care system. Choosing to work in a service organization lays the responsibility of creating a positive environment on each of us. It is this environment that often de-

termines the patient's perception of the quality of care received. As health care managers, we have the obligation to create and maintain an atmosphere of service and cooperation for both staff and patients. This is one goal of Contact Point Management (CPM).

#### **An Educational Process**

Contact Point Management is the conscious effort of all personnel in medical and dental facilities to give unconditional positive response to each person who comes in contact with the hospital or clinic. It is a process of training each staff member in the techniques of delivering optimal service, free from bias created by preformed attitudes and prejudgment based on our previous experiences. It is educating the staff to a new level of awareness of their individual importance and their interpersonal influence. It allows each staff member to accept responsibility and develop his full potential for providing service. CPM involves learning how to listen, how to seek out obvious and hidden problems; it involves responding to requests for assistance from other staff members; and it involves

LCDR Leadbeater and LT Coffey are instructors at the Naval School of Health Sciences, Bethesda, Md. 20014.

creating an enjoyable environment to deliver and receive care.

It would seem that this process could mean occasionally submitting to the unreasonable demands of the clinic abuser. However, one should no more take this approach than a parent should reward a child for misbehavior. CPM trains the staff how to deal with the abuser in a compassionate, firm, and respectful manner.

How to Begin

A good place to begin with CPM is to determine the status quo of your own service. A questionnaire can be developed by using Table 1 as a guideline. The questionnaire would be completed by you and your staff, other staff members who interact with your service, and by the patients who use your service. A careful analysis of the results should indicate where your service is strong and where it could use contact point training. A questionnaire and analysis sheet designed to accomplish this have been developed by the staff at the Naval School of Health Sciences and are available upon request. Just write to: Naval School of Health Sciences, Bethesda, Md. 20014.

#### What's Next?

Once you and your staff have identified general areas that require improvement, you can begin to design an education and training program. There are two sources of assistance for this part of your program—the Health Sciences Education and Training Command (HSETC) at Bethesda, Md., and the Education and Training Service at your own command. Table 2 lists areas that might be included in your program.

Remember that training a person to perform a task, which is an im-

portant part of CPM, is only a part of the process. Even more important is the education process. Your staff should learn how to accept responsibility, how to think and be innovative, how to implement policy, and above all, they should learn the importance of the role they play in the health care delivery system. A positive attitude of self-worth and importance will help your staff

develop the ability and skills necessary to respond effectively to people as they pass through our hospitals and clinics. For this reason, advice from professional educators is highly encouraged.

#### The Real Work Begins

We have now left the initial stages of the CPM program. The

#### TABLE 1. Criteria to Evaluate Contact Point Efficiency

#### Clinic Environment

- Easy to find and well identified
- · Pleasant decor
- Clean
- · Promotes confidentiality
- · Free of odors
- Comfortable

#### **Staff Appearance**

- · Well groomed
- · Professionally dressed
- Excellent posture

#### Greeting the Patient

- Prompt recognition
- · Pleasant greeting
- Expeditious telephone response
- · Correctly addresses patients
- Uses the name of the patient
- Correct messages to patients

#### Communications

- · Staff listens
- · Understands patient problems
- · Deals with foreign speaking patients
- Timely response to patient inquiries
- Correct information about appointment delays

#### Information Giving

- Familiarity with departmental procedures
- Familiarity with hospital policy and procedures
- · Provides correct directions

#### Staff Attitude

- · Willingness to help patients and staff
- Cooperation with other services
- · Enjoys helping patients

#### **TABLE 2. Contact Point Personnel Training Program**

#### Introduction

- · Goals and objectives of CPM
- · Definition of CPM
- Impact of CPM
- · Understanding the whole program

#### **Human Relations**

- Importance of the individual
- · Power of positive influence
- Understanding the patient

#### **Communications Skill Development**

- · The art of listening
- How to ask questions
- · Nondirective interviews
- · Clear transfer of ideas
- · Nonverbal communications
- · Effective use of the telephone

#### **Contact Point Responsiveness**

- · Identifying and dealing with difficult situations
- · Standards of courtesy and respect
- · Accepting responsibility
- · Manual of information
- · Manual of procedures
- · Proper use of policy

Note: This represents only a brief summary of what some of the topics could be and is not a complete program.

monitoring, reevaluation, feedback, and education process never slows down. It is the unrelenting determination of the manager that will make this program a success. The monitoring of the program can be done in several ways. Keeping track of compliments, complaints, patient satisfaction card, and impromptu discussions with patients are only a few. After a specific period of time, a reevaluation of the program could be done by reissuing the questionnaires. This would give you a basis of comparison and a measure of success. Very important to this whole process is the communications and feedback you have with

your staff. There is no room for secrets here. Being honest and having open channels of communication will usually guarantee success. Along the same lines, the education process is continual. Whether this takes the form of classroom sessions, seminars, or one-on-one discussions does not matter. Contact Point Management takes a good deal of effort and consumes much of your valuable time, but so does anything worthwhile. Remember, without some pain, there is no gain. Once you get started with the program, you will wonder how you ever did without it. So try it, you'll like it!



National Naval Medical Center, Bethesda, Md.

## The President's Hospital

Franklin D. Roosevelt—lawyer, politician, Assistant Secretary of the Navy, Governor, President, and one-time architect. History has much to say about our 32nd President, but few realize that FDR's taste in architecture directly influenced the design of a prominent government building.

Tradition says it was a trip to Lincoln, Neb., that sparked Roosevelt's creative genius. Nebraska's State Capitol building, unlike the domed structures of the other States, featured a multistoried tower with attached two-story wings. "Someday, I will build a government building

like that," FDR was quoted as saying. Undoubtedly, members of his official entourage sensed that this was not an idle comment.

On 13 Dec 1937, Roosevelt scrawled the design of the proposed Naval Medical Center on a piece of White House letterhead. The presidential wish became the architects' and builders' command.

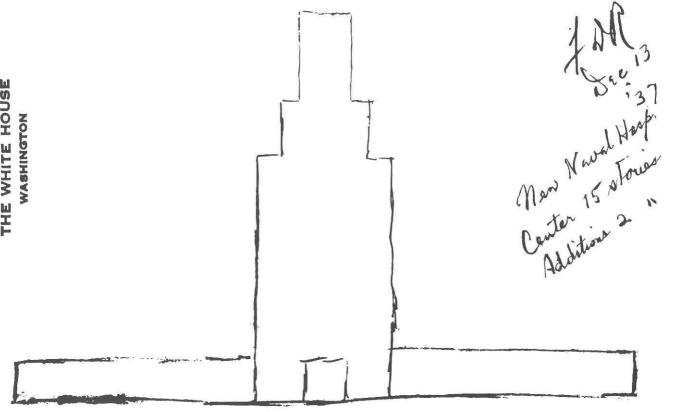
It was the same with the site for the new complex. From his open car, FDR chose a suburban Maryland farm as the location for his new naval hospital.

On 29 June 1939, ground was broken, and on Armistice Day one

year later, the President laid the cornerstone. It was on BUMED's centennial birthday, 31 Aug 1942, that Roosevelt dedicated the completed hospital.

The intervening years have brought the building both praise and criticism, the positive for its stylishly modern edifice and the negative for its serious functional deficiencies.

Even though FDR's hospital has served the Navy well for almost 40 years, building design is no longer determined by presidential whim. The new NNMC building, scheduled to open this year, was left to the pros. —JKH









(Top): The President's plan for the proposed Naval Medical Center. (Middle): FDR chooses the site—a cabbage field on a suburban Maryland farm. (Bottom): NNMC's Lake Eleanor had its origin in this rustic springhouse. (Right): President Roosevelt mixes mortar for the cornerstone on Armistice Day, 1940.

## Cold Weather Dentistry: A Review

CAPT M.R. Wirthlin, Jr., DC, USN

Cold weather medicine is one aspect of fleet operations for which there has been little dental research and for which there may be little experience in the military forces.

Cold exposure and injury may produce specific categories of casualties such as frostbite and hypothermia and their sequelae or injuries related to cold operations such as skiing accidents. The emergency care trauma and wounds may be affected by management problems in the cold; casualty evacuation may require special preparedness. There may also be special problems related to dental health maintenance in cold weather operations. The purpose of this review is to gather together the experiences of previous cold weather dentistry reports.

#### **Early Experiences**

Dr. R.G. Frazier was a physician who accompanied Admiral Byrd to Antarctica in 1939. Frazier's narrative account(1) of the effects of cold was alarming. He stated, "The most usual and most painful malady encountered was toothache. All devitalized and carious teeth became painful and had to be extracted. As soon as cold air was brought in contact with these dis-

eased teeth, the pain became unbearable." His account of the effects of cold further described fillings contracting and falling out or leaking, resulting in decay, tooth extractions, and the need to devise an emergency filling material. The only dental equipment in his medical supplies were two forceps and two elevators.

LT Jesse E. Owens, DC, USN, described experiences in dental care aboard an icebreaker and ashore in cold weather. (2) His review of seven emergency cases of toothache after cold exposure led to the conclusion that all were the result of previous carious exposure of the dental pulp. The cold was thought to be an irritant which made dormant conditions exacerbate or which brought attention to symptoms previously ignored. Based on his experiences ashore at Little America for Operation Hi Jump in 1947, Owens recommended a heated shelter and that the dentist be handy with carpenter's tools to insure a suitable facility for dental services. Dr. Owens had to build a dental chair out of packing crates and operate in a tent. He cautioned that anesthetic solutions in carpules might freeze and force the rubber stoppers out or result in leakage and possible contamination. He related that tests at the Naval Medical Research Institute showed no decomposition of other frozen dental medicaments and

materials recovered from Thule, Greenland in 1947.

Duncan (3) related his experiences in the Antarctic on South Georgia Island in 1953 as requiring much improvisation, but that the 18 months provided unforgettable satisfaction.

LT David Knoedler, DC, USN, was the first Navy dental officer volunteer for Deep Freeze I in Antarctica. He wintered-over at McMurdo Sound from December 1955 until February 1957. Dr. Knoedler had to pioneer the setting up of the dental facility and care for the 92 men he accompanied in the wintering-over party. All but two of the group sought dental care, and about 35 percent of the group were under treatment in an average month. It was not possible, because of limited time, to prepare the party to a high level of dental health before deployment. Dr. Knoedler did find instances of restorations falling out and complaints of toothache due to inhalation of cold air. These were found to be the result of previous secondary decay or deep restorations without adequate insulating bases. As a result of Dr. Knoedler's professional care, these problems were corrected with routine dental treatment. Gingival disorders also responded well to debridement and improved hygiene. Hypersensitive cervical dentin was a common complaint, but it responded to routine care.

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LT Owens examines a patient in a "dental chair" made from a packing crate at Little America in 1947. Just to the patient's left is a stovepipe "cuspidor" sunk into the snow. Recording Dr. Owens' findings is DT1 James Welch, USN.

Contrary to previous reports, oral hygiene was found to be good. Also, experiences did not confirm Frazier's accounts of shock following injection of local anesthetics which contained epinephrine. The only unusually high incidence dental care problems reported involved 10 cases of alveolar osteitis following 44 extractions and for which the cause was undetermined. (4)

The field dental equipment used was found adequate, but with time there was difficulty adjusting the dental chair headrest and the x-ray machine broke irreparably in midwinter. (5)

Subsequent dental support was provided for in a more organized and planned manner with the coordination of CAPT William R. Stanmeyer, DC, USN. (6) LT Robert J. Adams, DC, USNR, was ordered to duty sufficiently in advance of

deployment to be carefully indoctrinated and to prepare the winteringover party to an "essentially complete" category of dental health maintenance. CAPT Stanmeyer was also able to give dental first aid courses to the medical officers who would go to remote antarctic bases.

Dr. Adams helped build the dental facility at Little America and cared for the party that winteredover. (7) Subsequent reports (8-14) revealed that dental care was generally most similar to the practice encountered at a regular dental facility. Efforts were directed toward improving the facility, installing new equipment, and coordinating the supplies and spare parts needed. Eventually, the dental officers obtained the assistance of Navy dental technicians. A commonly reported problem was drainage from the dental operatory sink and cuspidor by gravity to the outside of the building upon the ground. Ice would gradually build up and plug the drain. Unplugging the drain required considerable effort with an axe and blowtorch in the dark at -40° F.

At the Pole Station there were occasional dental problems requiring tooth extraction by medical personnel. Some of these events were occasioned by lack of predeployment dental preparation in last-minute volunteers. (10) Naval instructions required that applicants for Operation Deep Freeze had to be, at a minimum, in a Dental Class 2 status. This allowed the dental officer to prepare them to Dental Class I status before deployment. Such effort paid off with minimum problems for those at remote stations. (11)

The dental officer's daily routine and many collateral duties did not leave much time for research projects, and the duties of the wintering-over party, especially during the busy summer construction period, left few men available for research subjects. Nevertheless, a number of investigations were attempted and reported during the International Geophysical Year (1 July 1957-31 Dec 1958) and a short time afterward.

Reports indicated two to three times as many sensitive teeth without insulating bases compared to those with bases. Small, deep fillings caused more problems than shallow, extensive ones. Fractured fillings and teeth most often followed a sequence of exposure to the cold, entering the rewarming area, drinking hot coffee, and biting on a hard roll or candy bar. (15) No differences in recurrent decay between inside and outside workers were detected. Therefore, differences in the coefficient of expansion of teeth and restorative materials were discounted as being significant. (16)

The temperatures measured on teeth ranged from 86° to 91° F indoors, but dropped to a 35° to 59° F range after 60 minutes in the cold. This was thought to be due to the increased mouthbreathing of cold, low-humidity air with exertion. Acid production after holding a 20 percent glucose solution in the mouth for one minute was demonstrated by decreases in mean dental plaque pH from 6.44 to 6.02. This effect was not found after 75 minutes exposure to the cold. (17) Also, lactobacillus counts of saliva samples dropped profoundly after the cold exposure. (17, 18, 19) Streptococcus salivarius counts varied inversely with lactobacillus counts. (19) Synder caries activity tests were reported more often positive for indoor workers than outdoor workers in 1966. (20) However, in 1971, there was no indoor/outdoor difference, but a drop in all workers with time was noted. (19) The implications of this were that the metabolic activity of microorganisms was inhibited by the cold, and this might affect tooth decay. No clinical differences in dental caries attack rates were ever documented to substantiate the hypothesis.

Specimens of saliva collected after prolonged residence in the Antarctic were found to have an increase of protein, tyrosine, and tryptophan. (21) No definite environmental effects on dental calculus formation rate were noted. (22, 23)

Monthly checks of cleanliness of the teeth by the dental officer, along with brushing instructions, resulted in an increase from 29 to 79 percent of the men being rated as "good." However, the proportion of those rated "poor" did not change; neither did a control group which did not get repeated exams and instructions. (24) The results of monthly exams and comments on hygiene by the dental officer were a

significant improvement over the number of inflamed gingival areas and reduced intensity of inflammation. (25) It was especially noteworthy that not a single case of Vincent's infection developed during the wintering-over. Of four cases treated, all were in the acute stage when the patients arrived in the Antarctic. (25) A double-blind trial of an experimental dentifrice did not show any improved effect over placebo, but again it was observed that inflammation was reduced during the deep winter months. (26) Subjects using waxed dental floss showed significant improvements in gingival health when compared to a group of nonfloss users. Both groups had a significant reduction in debris index compared to baseline levels during the winter, but showed a rise in September just before leaving Antarctica. (27)

The men at Antarctica consumed an average of over 4,800 calories per day, with a daily carbohydrate increase of 55 percent and a protein input increase of 100 percent over their usual diet. (28) One might burn 1,000 calories just in warming the very cold air breathed in a day. The average calories consumed dropped to about 4,000 during the dark winter months of primarily indoor activity. (28) With the increase in calorie consumption and the cold stress, an increase in vitamin requirements might be thought necessary. Tests in 11 volunteers over an eight-month period showed low normal values of urine ascorbic acid and increased excretion of nicotinamide. (29) The ascorbic acid plasma levels were lower in outdoor workers compared to indoor workers. (30) However, no gingival, mucosal, or other lesions could be attributed solely to vitamin deficiency.

A boxer-type mouthpiece was tried to protect the teeth from cold but it obstructed breathing and prevented talking. Outdoor personnel tried various means to protect their faces from cold. As a result, attempts were made to develop a cold weather facial protection device. (31,32)

#### The Lessons

All Navy personnel who volunteered for Deep Freeze operations were given a battery of psychological tests to weed out those who might develop behavior problems during the long period of isolation. The extraordinary dental health care efforts of the Navy dental officers during predeployment and wintering-over periods also served to make these antarctic personnel very unique. The sudden call to duty in cold weather of today's military units might not find them so well prepared. The best possible preparation would probably be a thorough dental inspection and dental care of personnel before departure. (33)

Information, training, and cold weather exercises will instill confidence in being able to adapt and perform in cold weather. (34,35) Dental personnel should know the rudiments of cold weather living. They must know how to operate field dental equipment and how to make it perform in the cold. Knowledge of shelters, heating stoves, and generators will be indispensable to successful operations. Items which can be damaged by freezing must be protected during shipment and not stored on the deck where temperatures may be below freezing. This is particularly applicable to local anesthetic carpules. Adequate heating inside a shelter may be in the 50-55° F range, and this could increase discomfort of injected anesthetics. (12) Teeth should be restored with cement bases.

Water will be limited in freezing climates. This will affect scrubbing,

sterilizing, x-ray film washing, drinking, personal hygiene and camp sanitation, and fire-fighting requirements. Personnel might be reminded that their teeth can be cleaned by brushes, floss, and toothpicks without the need for water. Air compressors and air lines will not perform if the moisture in the compressed air freezes in the lines. Sewage lines or the effluent might need to be heated. (2, 12)

Control of hemorrhage and preliminary treatment of shock should be done in the open and then the patient should be evacuated to a heated battalion aid station. Freezing conditions may prevent use of plasma in forward positions or cause blood-soaked dressings to freeze. (2) Warm water (100-110° F) will be needed for rewarming frozen tissues. Rapid warming should not be continued beyond the time when thawing is complete. Topical anesthetic ointments or viscous solutions should be available for palliative treatment of frostbite of lips and tongue. (36)

Despite all preparations, dental problems can be a cause of non-effective days for military units in the field. In one two-week training exercise in cold weather there were 155 dental cases in an average strength of 9,870 personnel. Most common after that were 60 orthopedic and 47 cold complaints. (37)

The conclusions to be made are that dental support in the field is not merely a morale factor for the troops. The best preparation is a high level of dental health maintenance before beginning military operations in the cold.

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## Sticks and Stones Can Break My Bones

Stanley J. Debiec, Jr.

"Sticks and stones can break my bones, but names will never hurt me."

More false words were never spoken. The signs of physical injuries inflicted by "sticks and stones" or belts, boards, cords, shoes, hands, or feet usually heal. The emotional scars left by the hurt of abuse and neglect seldom do.

Child abuse and child neglect, by whatever terms used to describe them, permeate society. In military, as in civilian life, abusive and neglectful situations are found among people of all occupations, all income levels, races, colors, religions, and both sexes. No one knows with certainty the magnitude of the abuse problem, civilian or military, in the United States. All we have are estimates: we are talking about one million cases of child abuse, nationwide a year; 2,000 deaths directly resulting from abuse a year; 60,000 cases of physical injury a year; 6,000 cases of permanent brain damage a year. Another estimate we have is that it costs \$700,000 to provide lifetime institutional care for a severely brain damaged child. We are talking about over \$4 billion to care for a small fraction of children hurt every year-and that is only the money costs we are measuring.

What about the social costs? The social costs to the victims are im-

measurable. The social costs to each of us as human beings are also immeasurable. We have no way for society to know how much we could have benefited from these victims who, through no fault of their own, cannot produce to their full potential. Often they cannot produce the material goods—a house, a car, a job. They also have difficulty producing a home-a happy wife or husband, well adjusted children, warmth, sharing, caring, love. They cannot produce because they have been damaged, not necessarily brain damaged, but physically, psychologically, mentally, and emotionally damaged. They have been injured early in life when they should, could, and had every right to be learning how great life really could be.

Unfortunately, we tend to be dollar oriented and have not really developed ways to measure these social costs. However, we do know several things about abuse. We know that people abused as children are more likely to abuse their children, that isolated people tend to abuse, that substance abuse often leads to child abuse, that young, inexperienced parents under stress use their children as objects of all their frustrations.

We also know how to prevent abuse. We know that the signs of potential abuse can be recognized early, as early as the prenatal clinic visit, the delivery room, the nursery, the two-week or six-week well baby visit. We know that often there are more stressful times when people are likely to abuse. By inter-

vening early, when we spot certain "high risk" danger signals, we can "plug" people into support systems. This helps reduce or eliminate the times they vent their frustrations on their children. In other words, we know that child abuse is both predictable and preventable.

At NRMC San Diego, as at all hospitals, we are making attempts to predict and prevent abuse. We have a long way to go but with experience, we are improving. We are fortunate to be part of a Family Advocacy Program encompassing child abuse/neglect, spouse abuse/ neglect, sexual assault and rape. The program has two features. It is directly funded, which means costs are specifically planned and committed, as limited as they are. The Family Advocacy representative has no other duties except family advocacy. In many past efforts, advocacy personnel performed their duties on a collateral basis. Personnel had to find time to devote to family advocacy among all other duties. At NRMC San Diego, and a growing number of other facilities, the Family Advocacy representative is assigned to a fulltime effort for child, spouse, sexual assault, and rape programs.

The Family Advocacy Program (outlined in BUMEDINST 6320.57) requires, among other efforts, the designation of a Family Advocacy representative and the formation of a Family Advocacy Committee. Among many duties, one of the Family Advocacy representative's functions is to help develop and locate resources for military de-

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pendent children and families, especially those experiencing abusive or neglectful situations. In doing so, Navy regulations, state and county laws, and the needs of NRMC San Diego, must be matched with the needs of the families needing assistance. We provide liaison with the appropriate military and civilian agencies and resources and coordinate the evaluation of all reported cases in order to develop necessary treatment and prevention plans and programs.

The Family Advocacy Committee acts as a body to review health care services to dependent families, especially those relevant to victims of abuse, neglect, sexual assault, or rape. It establishes guidelines for management of individual and community problems relating to prevention, protective, remedial, therapeutic, and any other essential services responsive to the needs and welfare of Navy families. Our committee is chaired by a senior Medical Corps officer appointed by the commanding officer (currently the chairman, Department of Pediatrics) and meets monthly. Its members are from various fields and disciplines, such as medicine, law, American Red Cross, Alcohol Rehabilitation Service, Naval Investigative Service, Chaplain Corps, social work, and administrative services. This committee works closely with the civilian social services. police, and hospital authorities to insure the maximum utilization of military and civilian resources.

In addition to our three working subcommittees (Child Abuse/Neglect, Spouse Abuse, Sexual Assault and Rape), we at NRMC San Diego, have tasked the Child Abuse/Neglect Subcommittee with the additional role of intervention team. The team is appointed by the chairman of the Family Advocacy Committee, with a purpose of providing primary medical consulta-

tion, evaluation, and treatment for victims of child maltreatment. It is comprised primarily of pediatricians especially knowledgeable in the identification and treatment of abuse and neglect victims and also includes a Chaplain, Nurse Corps representative, and social worker. The team meets weekly to discuss and plan for all cases of reported suspected child abuse and neglect, and also those "grey area" cases where no report is initially filed but which further investigation may indicate risk. On a weekly rotational basis, one physician of the team is designated the Child Abuse/Neglect Subcommittee Watch. That physician's responsibility is to be the medical contact person for all suspected cases of abuse and neglect which present through any service in the medical region.

The problem will not be solved by only the doctor, the nurse, the social worker, or the lawyer-the list goes on and on. We all have professional, ethical, and moral responsibilities to do something. The first step is to keep from closing our eyes to what is going on all around us. The second is to do something about it. Recognize and report. Finally, we must educate and train ourselves to act in a nonjudgmental manner toward abusive parents, to be accepting of the parents or caretakers but not of their behavior and to show a genuine desire to help. This is not an easy task when dealing with a social problem that is replete with judgment, is emotionally laden, and where the desire for retribution is often strong. We can and do have a role in changing the childhood refrain to:

"Sticks and stones can hurt my bones—names, they also scar me. The love you have, you cannot show; without your love, I cannot grow. Please learn how to help me."

## An Essential Partner in Naval

### Readiness

LCDR S.B. Haberkorn, MSC, USNR-R

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Historically, currently, and prospectively the Naval Reserve constitutes a vital capability in naval readiness. In his concept of "One Navy," the Chief of Naval Operations has given strong support to the viability of our Naval Reserve forces. Comparable attention and support has been given to our Navy Medical Department Reserve components by the Surgeon General in his emphasis on "One Medical Department."

The purpose of this article is briefly to outline and discuss the officer Naval Reserve organization and the variety of programs available. To be sure, the subject of Naval Reserve recruitment, training, retention, and readiness has been addressed in previous issues of U.S. Navy Medicine. It has been the subject of various directives as well. Nonetheless, recent changes in the Naval Reserve organization, the different programs available, and the general lack of information on these matters among active duty officers gives cause for an update.

All active duty officers should be cognizant of the Naval Reserve organization and programs. Among those Reserve officers who return to civilian status upon completing an obligated tour of active duty, there are misconceptions about military status and further Reserve obligations. Among Regular officers on active duty, greater familiarity with Naval Reserve programs will enable us to be more effective in our efforts of personnel recruitment, training, and retention, as well as contingency planning.

#### Organization

Components of the Naval Reserve are the direct responsibility of the Chief of Naval Operations with a chain of command as diagrammed in Table 1.

CNO (OP-093), the Surgeon General of the Navy, is the program sponsor for the Naval Reserve's medical program. This program is coordinated by the Special Assistant for Naval Reserve, Bureau of Medicine and Surgery (MED 02D). The mission of the Office of Special Assistant for Naval Reserve is to serve as a central coordination point for all aspects of the Reserve medical program. This office informs, advises, and assists the Assistant Chief for Professional Development on all matters relating to the Reserve program, interacts with the Contingency Planning Division to determine Reserve requirements and capabilities, and maintains direct liaison with the Chief of Naval

Reserve and Reserve field activities regarding the administration, training, and mobilization of Reserve medical assets.

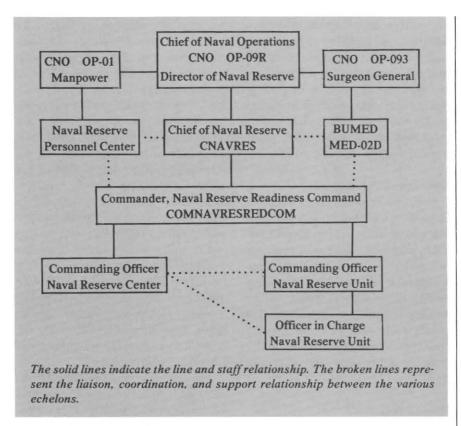
#### Reserve Programs

There are 40 programs in the Naval Reserve, two of which involve most of our medical specialty reservists. Program 9-Marine Corps Forces, provides deployable field and air combat medical support to insure the deployment capability of the Fourth Marine Amphibious Force and Air Wing. Program 32-Medical Program, includes Advanced Base Functional Component (ABFC) Station Hospital Units, **Environmental Preventive Medicine** Units, Surgical Teams, Naval Regional Dental Center Units, and Medical/Dental Volunteer Training Units. Later this year, this program will also include newly established Naval Regional Medical Center Units. The role of the Naval Reserve, therefore, is to enhance the active force to provide capability for sustained combat operations afloat and ashore.

#### Reserve Status and Mobilization

Delineating mobilization resources, naval reservists serve in either Ready Reserve, Standby Reserve, or Retired Reserve status. All Reserve and Regular officers need to be particularly familiar with the structure of the Ready Reserve, the

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first echelon of Reserve support in time of mobilization.

Ready Reserve is a status in which members are serving under a statutory military obligation or under a written Ready Reserve Agreement which must be executed for an indefinite period of time. All officers holding a commission in the Naval Reserve who are released from active duty and who have not completed their six-year statutory military obligation, are automatically appointed in the Ready Reserve. Officers of the Ready Reserve (USNR-R) are, if otherwise qualified by rank and age, eligible for assignment to pay billets. They may also receive pay and allowances for authorized periods of active duty for training (ACDUTRA). Ready Reserve officers are also eligible to be considered for promotion with their contemporaries. Although all Ready reservists are liable for recall to active duty in time of war or national emergency, members of the Selected Reserve (those in drill pay status in organized Reserve units) receive first priority. Selected reservists constitute the principal source of trained manpower to augment the active force. The current authorized strength of the Selected Reserve is 87,000 members. Those members of the Ready Reserve not on active duty and not participating in the Selected Reserve are classified as Individual Ready Reservists. Personnel in this category include Campus Liaison officers, Seapower Presentation teams, and members of Volunteer Training units. Individual Ready Reservists perform their duties and attend drills without pay. They perform ACDUTRA with or without pay as funding permits. This category of the Ready Reserve is the second priority group for mobilization.

Drilling Ready Reservists, pay and nonpay, is required to maintain at least a 90 percent drill attendance at regularly scheduled drills (usually one weekend per month) and to perform ACDUTRA annually. If any member cannot perform ACDUTRA during any given year because of personal hardship, job commitments, or because of poor health of a family member, he or she may request a waiver of ACDUTRA from the appropriate Reserve Readiness Command.

Standby Reserve is a second Reserve category which consists of two groups. The Active Standby (USNR-S1) is comprised of reservists who are still under a statutory military obligation, but are not able to participate actively in a Reserve drill program, and those who are otherwise eligible to participate in a Naval Reserve training program for retirement point credit as authorized by the Secretary of the Navy. Officers who are serving in key Federal, State, and local government positions are also assigned to S1 status. These officers must earn at least 12 retirement point credits each year in order to stay in S1 status. These officers are expected eventually to return to Ready Reserve status. Officers in USNR-S1 status below the rank of captain are eligible for promotion but are not authorized to receive pay and allowances for any participation or training duty. These members are liable for recall to active duty on a third priority basis without their consent in time of war or national emergency declared by Congress. Inactive Standby (USNR-S2) officers are those who have not executed a Ready Reserve agreement upon completion of their statutory period of obligated service, have not renewed an expiring agreement when solicited, or have failed to earn sufficient retirement credit points while in USNR-S1 status. Individuals who have been in this category for a period of three years will be given the option of executing a Ready Reserve agreement, requesting transfer to the Retired List if qualified, or being discharged from the Naval Reserve. Members in this status are not generally subject to recall to active duty.

Retired Reserve is the final category. An officer who has completed 20 years of qualifying Federal service may request transfer to the Retired Reserve. He or she will remain in the Retired Reserve without pay until reaching the age of 60, at which time retired pay begins. All members of the Retired Reserve are liable for recall to active duty. They are the last group of reservists to be recalled.

#### Reserve Benefits

Some of the benefits of active participation in the Naval Reserve include eligibility for Servicemen's Group Life Insurance and the use of military exchanges. For the Selected reservist it means additional income commensurate with rank or pay grade and time in service. Medical and Dental Corps Selected reservists can qualify for professional pay as well. For all reservists who affiliate and participate sufficiently to qualify for the Retired Re-

serve, it is an excellent retirement program. In addition to the health care and other benefits of retired military personnel, the retired reservist at the age of 60 is eligible for retired pay, the amount based on rank/rate, length of service, and the total number of retirement points earned during military service.

#### **Retirement Point Credits**

Retirement point credits may be earned by joining a drilling unit, attending drills, performing ACDUTRA, attending approved meetings or conferences, completing correspondence courses, and recruiting, among other duties. Ready reservists are required to earn at least 50 points each year in order for that year to be considered as a qualifying year for retirement and participation.

#### How to Join

An officer or an enlisted member who is interested in investigating the responsibilities and benefits of participation in the Naval Reserve must be prepared to take the initiative. Unlike the very active Naval Reserve recruiting program for enlisted personnel, the officer Reserve program does not have a routine mechanism in place for con-

tacting all eligible officers for membership in the Ready Reserve. The officer should contact a local Naval Reserve Recruiting Office, a Naval Reserve Center, or the Medical Program Officer at the appropriate Reserve Readiness Command. The Medical Program Officer is generally more expedient as he knows precisely what opportunities exist for officers with a medical, dental, or allied health specialty in the Naval Reserve. Selected Reserve billets (drill pay status) are not readily obtained by persons holding certain specialty codes. It is therefore often beneficial for the officer to sign a Ready Reserve agreement, enter on a nonpay basis, and then work through the system to explore the possibilities of obtaining a paid billet.

As with any job, membership in the Naval Reserve program should be considered carefully. It is a program constantly in a state of flux, reflecting the dynamic needs of the active forces. It is also less structured than the active force, necessitating a more aggressive role on the part of each Reserve officer. By the same token, to be in the Naval Reserve is a privilege, a responsibility, and a professional challenge second to none.

#### **American Board Certifications**

(Subspecialties are indicated in parentheses)

American Board of Family Practice
CDR J.K. Lee, MC, USNR
LCDR A.J. De LaMorena, MC, USNR
LT S.D. Condie, MC, USN
LT R.R. Holloway, MC, USNR
LT W.E. Minteer III, MC, USN
LT S.C. Reichley, MC, USNR

American Board of Internal Medicine LCDR L.D. Freeman, MC, USNR LCDR A.C. Hayes, MC, USN LCDR F.M. Khan, MC, USNR American Board of Internal Medicine (con.)
LCDR D.R. Masys, MC, USNR
LT R.W. Haerr, MC, USNR
LT H. Levinsky, MC, USNR
LT P.A. Role, MC, USNR

American Board of Otolaryngology LCDR R.M. Clayton, Jr., MC, USN

American Board of Professional Psychology LT J.D. Robinson, MSC, USNR-R (Clinical Psychology)

## Mesenteric Infarction Following Exercise in a Patient With Sickle Cell Trait

LCDR Steven R. Shackford, MC, USN

LCDR Adrian L. Herren, MC, USN

CDR Jerry D. Spencer, MC, USN

The clinical significance of sickle cell trait continues to be debated. In 1970, Jones et al(1) attributed four cases of sudden death after exercise in Army recruits with sickle cell trait to sickle cell crises. Hypoxia, acidosis, dehydration, increased blood viscosity, and hypercoagulability were felt to have played a role in precipitating these crises. However, after reviewing the morbidity of sickle cell trait, Sears (10) concluded it was not possible to assess the role of the hemoglobinopathy in such reports of exertion-induced syndromes since such illesses occur in subjects without sickle cell trait, and, although sickling in the venous circulation has been found during exercise, clinically significant sickling has not been proved to be induced by physical stress. The purpose of this report is to review the clinicopathologic findings in a Navy recruit who expired after exercise with infarction of the small bowel associated with sickle cell trait and to discuss the possible pathophysiology.

#### **Patient Report**

A 24-year-old recruit, in his first week of training, arrived at the emergency ward of NRMC San Diego, Calif., unconscious and with a rigid and distended abdomen. He had been in excellent health until approximately one hour prior to admission when he complained of severe abdominal pain following a 3.2 km run. The exercise began less than two hours after eating and lasted approximately 45 minutes. He subsequently collapsed and suffered a respiratory arrest. He was revived with mouth-to-mouth resuscitation and rushed to the hospital.

On arrival at the emergency room, he was in shock

with a systolic blood pressure of 60 torr. An arterial blood gas examination revealed a pH of 7.08 and a base deficit of 30 with a hemoglobin of 7 grams percent. Blood was obtained for further diagnostic studies and two large intravenous catheters were placed. He received two units of type specific blood, three liters of crystalloid solution, and two ampules of bicarbonate with an improvement in systolic blood pressure to 100 torr, a pH of 7.28, and a base deficit of 10. After tracheal intubation and placement of a nasogastric tube, he became alert and responded to verbal commands. Gastric lavage was grossly bloody and failed to clear with iced saline. Admission laboratory tests showed a prothrombin time of 16 seconds (control of 12 seconds), a thromboplastin time of 87 seconds (control of 32 seconds), and a platelet count of 260,000/mm<sup>3</sup>. Four units of fresh frozen plasma were administered. Because of persistent shock and progressive abdominal distention, a peritoneal lavage catheter was introduced. Before introduction of the lavage fluid, the catheter was aspirated and returned 50 cc of nonclotting blood. Subsequent laparotomy confirmed the diagnosis of hemoperitoneum. There was a 1 cm gastric perforation of the greater curvature near the pylorus which was actively bleeding. The abdominal cavity contained grossly undigested food. There were areas of obvious ischemia throughout the length of the small intestine. The gastric perforation was quickly closed in two layers. Simultaneously, it was noticed that the wound edges began to bleed profusely as did all the patient's mucous membranes. The patient became hypotensive and suffered a cardiac arrest. The aorta was crossclamped and the chest opened for cardiac massage. Ten additional units of blood, seven liters of crystalloid, and six units of fresh frozen plasma were unable to restore adequate perfusion. Further attempts at resuscitation failed; the patient continued to hemorrhage and expired.

Dr. Shackford is Director, Shock and Trauma Research Unit and head, Trauma Branch, Surgical Service, NRMC San Diego, Calif. 92134. Dr. Herren is staff anesthesiologist and Dr. Spencer is staff pathologist, NRMC San Diego.

Autopsy confirmed multiple infarcts of the ileum and jejunum and demonstrated a subcapsular hematoma of the liver. Microscopic examination of sections of the stomach, jejunum, and ileum showed focal serosal, mucosal, and submucosal hemorrhage containing fragmented and sickled cells. Microscopic examination of sections of the jejunum showed thrombi in the submucosal vessels. There was focal loss of the lining epithelial cells. Many small vessels had thrombi composed of normal and sickle-shaped cells (Figures 1 and 2). The spleen showed prominent congestion in the perifollicular regions with most of the sinusoids packed with sickle-shaped cells. The kidney also had large numbers of sickle cell thrombi. Blood originally drawn for cross-match procedures (prior to transfusion) was examined with hemoglobin electrophoresis and demonstrated quantitative levels of hemoglobin S of 40.4 percent, hemoglobin A of 56.7 percent, and hemoglobin A<sub>2</sub> of 3 percent. Serum myoglobin was 250 ng/cc (normal 8-65 ng/cc).

#### Discussion

Intestinal infarction associated with sickle cell trait is rare. McCormick (3) reviewing 120 autopsies with sickle cell trait, noted infarction of the large and small bowel in two necropsies, but failed to elaborate on any relationship between the infarction and the sickle cell trait. When visceral infarction did occur, it was attributed to hypoxia secondary to altitude or a hemoglobin S (HbS)

of greater than 40 percent. (7) The case reported herein occurred at sea level with a HbS of 40.4 percent.

The presence of sickle cells near the infarcted areas and the absence of other recognized etiologies suggests a causal relationship between sickle cell trait and the small bowel infarction in our patient. The effects of hemorrhagic hypovolemia, recently ingested food, and exercise on the splanchnic blood flow could have produced a stagnant, hypoxic environment in the small bowel leading to erythrocyte sickling, tissue infarction and, subsequently, disseminated intravascular coagulation.

No study has measured splanchnic blood flow in an exercising man after eating. Norryd(5) noted superior mesenteric blood flow to increase an average of 60 percent within five minutes and 113 percent within one hour in resting subjects after eating a standard meal. This was associated with an increase in the ratio of superior mesenteric artery blood flow to cardiac output from 12 to 22 percent suggesting a redistribution of blood flow to the splanchnic circulation presumably in response to increased metabolic demand. However, during exercise, Rowell (9) was able to measure a reduction of hepatic blood flow in excess of 80 percent in 11 healthy adults. During exercise to exhaustion, hepatic venous oxygen content fell to 0.6 ml in three subjects demonstrating almost complete extraction of oxygen. Elevated hepatic venous lactate concentrations indicative of hepatic-splanchnic hypoxia were also noted. In another study, Rowell (8) measured a fall in

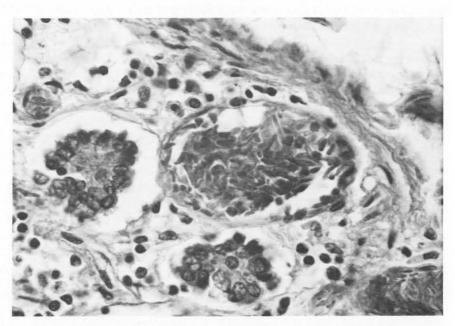


FIGURE 1. Photomicrograph of submucosal vein demonstrating thrombus composed of sickled red cells.

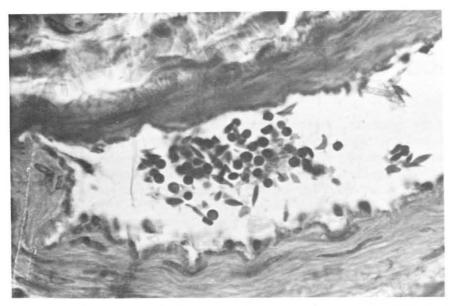


FIGURE 2. Photomicrograph of small mesenteric artery demonstrating sickled red cells.

splanchnic blood flow from an average resting value of 1.61 1/min to values ranging from 820 to 390 ml/min during moderate to severe upright exercise. In addition, he found a reduction of 35 percent in splanchnic blood volume. Such decreases in splanchnic volume and flow coupled with increased demand and maximal oxygen extraction would provide an hypoxic and acidic environment which could have led to sickling in our patient.

Rickels and O'Leary (6) consider the sickled erythrocytes as the primary factor in initiating vascular occlusion by increasing blood viscosity and promoting sludging in the capillaries and small venous channels. The anoxia in local areas of the microvasculature may result in endothelial disruption and exposure of subendothelial tissue, such as collagen, to the circulating blood. The exposed collagen may then initiate thrombosis either by promoting adhesion and subsequent aggregation of platelets or by activating Hageman factor. These authors also noted that disturbances in reticuloendothelial function may occur in patients with sickle cell disease. These patients are at a greater danger of developing disseminated intravascular coagulation (DIC) because the liver and spleen may be unable to remove particulate thromboplastin. The association of DIC with exercise-induced syndromes or sudden death in sickle cell trait has been well documented. (2, 4, 11)

The diagnosis of mesenteric infarction should be considered in those patients with sickle cell trait presenting with an acute surgical abdomen. Suspicion should be

heightened if HbS concentration is greater than 40 percent, abdominal pain occurs with postprandial exercise, and postprandial abdominal pain occurs in unacclimated individuals at high altitudes.

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## Immunization Survey in a Military Practice LCDR William W. Burns, MC, USN

Much concern has been expressed over the immunization status of children in the United States. (1) The American Academy of Pediatrics, as part of its program during the International Year of the Child, adopted the position that "all children should be immunized against the preventable infectious diseases for which there are recommended immunization procedures." (2) Audits of immunization completeness have been performed previously in private practices and public health department clinics by means of chart reviews. (3, 4) The author undertook the present survey to evaluate the completeness among patients seen in a military pediatric practice.

#### **Patients and Methods**

The pediatricians at this institution care for military dependents from birth to age 17. The immunization status of all patients seen by the author during a one-month period (7 May-7 June 1979) was determined by parent/child interview and review of the child's medical record at the initial contact. Completeness of immunizations was judged against the current recom-

mended schedule. (5) A tally sheet was kept for different age groups (0-23 months, 2-4 years, 5-9 years, 10-14 years, and 15+ years). Those whose total medical care had been given at military medical facilities were differentiated from those whose care had been given in part at other than military facilities (Table 1). A qualitative assessment was made of the compliance with recommended immunization schedules. Three large groups were tallied—those with complete immunizations, those lacking one to two inoculations for age, and those lacking three or more.

#### **Results and Discussion**

The overall completeness of the survey group (all ages), as shown in the table, was 83 percent. Seventeen percent were behind 1-2 doses of vaccine. No children were behind more than two doses.

Seventy-nine percent of the patients received total military care, and of this group 84 percent had up-to-date immunizations. Twenty-one percent of the patients received partial military medical care, and of this group 77 percent had up-to-date immunizations.

224

Total Partial | Military Care Military Care Total Complete Incomplete Complete Complete Age Incomplete Incomplete 0-23 months 82 16 11 0 93 16 2-4 years 9 32 1 41 3 5-9 years 40 1 11 2 51 3 10-14 years 21 3 9 5 30 8 15 +5 12 4 9 17

44

13

TABLE 1. Completeness of Immunization Schedules by Age and Source of Medical Care

180

34

Total

47

Dr. Burns is staff pediatrician at the Naval Aerospace and Regional Medical Center, Pensacola, Fla. 32512.

This difference was not statistically significant (by chisquare test).

An interesting finding was that 35 percent (9 of 26) of the older adolescents (age 15+) were inadequately immunized at a time when measles prevalence was noted to be higher in Florida than overall in the United States. (7) For the most part, this age group had received killed-virus measles vaccine, or had received live-virus measles vaccine prior to 12 months of age. In either situation, reimmunization should have been performed in accordance with the current recommendations. (6)

Many infants found to be behind on immunizations had had routine inoculations deferred at "well-baby" examinations due to intercurrent febrile illness, not due to parental neglect.

All parents of patients found to be delinquent in obtaining immunizations were counseled to update their immunizations.

It was the author's impression prior to conducting this survey that the level of immunization among military dependents is relatively high, and this impression was confirmed. This level compares favorably with the level found among two-year-olds in a chart audit by Bloom. (4) These reassuring data reflect good availability of this important preventive measure and good compliance among military dependents.

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#### **CAT Scanner at Oakland**

A new General Electric 8800 Computerized Axial Tomography (CAT) scanner, capable of producing high resolution images of both head and body, and purported to be one of the most technologically advanced models available in the nation, is now in full operation at NRMC Oakland.

CAPT Robert L. Houts, Chairman of Radiology Service, in reporting on the equipment's capability of producing "exquisitely clear anatomic images beyond the conventional radiograph," said that the CAT scanner is able to detect subtle differences in human tissue and to produce lifelike images never before achieved.

"It is able to show distortions of normal anatomy such as tumors and give an idea of their pathological nature by using x-rays and highly advanced computers to assimilate many small pieces of information," he explained. (A computed tomography scan is developed from multiple x-ray absorption measurements and is actually a computer reconstruction of a slice or body section.)

The scanner's use on the head allows radiologists to distinguish between gray and white matter of the brain, thereby making it possible to pinpoint specific location and diagnose the type of problem.



A Navy corpsman plays the role of a patient ready to undergo examination by a new CAT scanner at NRMC Oakland.

In addition to the scanner itself, the system is equipped with a radiotherapy planning program which can be used to set up treatment plans for cancer victims.

With its most recent acquisition of the accessory Scout View Package, Oakland becomes the first site in the entire western United States to have this precision instrument, which allows great detail in studies of localized areas of interest within a patient's body. Because of its precision, the Scout View limits the total number of scans necessary for diagnostic purposes, thereby reducing radiation exposure to the patient.

Basic components of a CAT scanner are a patient handling table, scanning gantry (which is a movable frame containing the collimated x-ray source and detector), data acquisition electronics, x-ray generator, computer, and the operator and viewing consoles. Data acquisition and image reconstruction may proceed simultaneously through use of the time-sharing capabilities of the computer.

History of the development of the scanners reaches back to 1967, when Godfrey Hounsfield from the Central Research Laboratories of EMI, Ltd., in England, undertook gamma and x-ray experiments in tomographic reconstruction. His examination of a preserved, diseased human brain, with cooperation of the British Department of Health and Social Security, and Dr. James Ambrose, Consultant Radiologist at Atkinson Morley's Hospital, revealed dramatic results and led to the development of the first clinically useful CT equipment.

They were able to clearly see the cause of disease—a brain tumor—convincingly isolated by the tomographic reconstruction, and could additionally distinguish between the gray and white matter of the brain.

# Serendipitous Discovery of Artificial PositiveWeil-Felix Reaction Used in "Private Immunological War"

E.S. Lazowski S. Matulewicz

In 1916, during the epidemic of the classic, louse-borne typhus (epidemic typhus or jail fever) in Southeast Poland, Edmund Weil, a Pole, and Arthur Felix, a Czech, found *Proteus* in urine of patients with typhus. Agglutinins to certain *Proteus* were also found in the serum of these same patients.

This bacillus strain was termed "Proteus X," and the specific strain of typhus became "OX-19." It was also discovered that Proteus is agglutinated not only by the patient's serum, but also by sera of others suffering from typhus. The strain was agglutinated to a titer of from 1:50 to 1:50,000 by typhus sera and never 1:25 by the serum of nontyphus patients. (1) At this time, Felix was even of the opinion that Proteus and Rickettsia prowazeki (named after the American Howard Ricketts and the Austrian Stanislaus von Prowazeki), which caused typhus, were genetically related. (2) As we know, this was not true and Proteus is not an etiological agent in epidemic typhus.

Since 1916, Weil-Felix's reaction has remained a simple and useful diagnostic test for epidemic typhus and is valid diagnostic evidence in the presence of clinical symptoms. (1) During World War II, the test was used as a confirmation of typhus fever by Germans.

The Weil-Felix reaction is still in common use as a screening test and is simple and economical. Complement fixation methods for diagnosis of rickettsial disease are more specific and satisfactory, but they are laborious and expensive. Rickettsial agglutination and hemagglutination procedures are also available but are

not practical for the clinical laboratory. (3)

In fact, the Weil-Felix reaction is not specific in the diagnosis of epidemic typhus. False-positive reactions may occur with *Proteus* urinary tract infections, leptospirosis, *Borrelia* infections, and severe liver diseases. (3) Antibiotics, as well as aging of commercially available antigen, may suppress or delay antibody production.

In addition to epidemic typhus, murine typhus and Rocky Mountain spotted fever are also linked with *Proteus* antibody formation, but they are not known in Europe. False negative reactions may occur in patients previously vaccinated against epidemic typhus and who later develop natural infections. (3)

The Weil-Felix reaction is based on cross-reaction and is not related to rickettsial antigens at all. Antibodies formed in the course of certain rickettsial diseases react with polysaccharide "O" antigen of certain strains of *Proteus* "X" bacteria. (2) The original strain of *Proteus* used by Weil-Felix was strain OX-19, which was found to be the most specific for epidemic typhus. This strain, killed by formalin, has been used ever since as the reagent for the Weil-Felix reaction.

Agglutinins usually appear in seven days after the onset of the disease, increasing to a maximum in about 15 days, and then decreasing slowly over several months. Generally, titers of 1:80 are suspicious and titers of 1:160 are significant. (4) A fourfold rise of agglutinin titer is considered diagnostic for active infections. (5)

One of us (Dr. Matulewicz) reasoned that if in vitro *Proteus* suspension agglutinated the serum of a person with epidemic typhus, perhaps an injection of this suspension in a healthy person might cause his serum to agglutinate the *Proteus* OX-19. (6)

Reprinted from the American Society for Microbiology News, June 1977. Dr. Lazowski is an assistant professor at Northwestern University Children's Hospital School, Chicago, Ill. 60608. Dr. Matulewicz is a professor at the National University, Kinshasa, Republic of Zaire.

The *Proteus* OX-19 in suspension used for the Weil-Felix reaction was treated with formalin. The amount of formalin in the suspension was about the same as in the typhoid vaccine commonly used. Theoretically, the suspension seemed to be relatively as safe as an injection of typhoid vaccine. Would such an injection convert the serum of a healthy person to Weil-Felix positive?

During the German occupation of Poland in World War II, the Germans realized their plan of extermination of Jews and Poles as "racially inferior groups." Hitler's biological materialism disregarded all ethical and humanitarian principles. As a result, during the six years of occupation, about one-fifth of the population of Poland was murdered in mass executions, prisons, and concentration camps or died as a consequence of other misfortunes of occupation. (7,8) Because the Germans needed cheap labor for war industry and agriculture, they transported thousands of Poles and forced them into slavery in Germany.

At this time, Polish physicians were confronted with a special task—not only to prevent diseases and treat sick people, but also to defend their lives and those of their countrymen.

In the General Government (as Germans called occupied Poland), because of deteriorating sanitary conditions, epidemic typhus, or the "disease of human misery," appeared. Hospitals became overcrowded, and the majority of patients were treated at home. When many cases were reported from an area, it was declared by the German Public Health Authority to be an "epidemic area." This situation produced some advantages for the people, because the Germans were inclined to avoid such territories and the population was relatively free from atrocities.

Epidemic typhus had not been reported in Germany for more than 25 years before World War II. (5) The immunological resistance of the Germans was lower and mortality was higher in respect to epidemic typhus than was that of Poles and Russians. Germans were afraid of spreading typhus among their own population.

A strong ordinance in the General Government required physicians to report to German health authorities all suspected and confirmed cases of epidemic typhus. For diagnostic purposes, samples of blood were mailed to German-controlled state laboratories. In the case of a positive result, laboratories were obliged to notify the German authorities first and then the physician who provided the specimen.

On one occasion a Polish laborer, deported to Germany, was granted a 14-day leave to visit his family in the "General Government." If he did not return to Germany on time, he would be followed by the police, and, if he was not found, his whole family would be

arrested and transported to a concentration camp. Only a serious disease, verified by a physician's certificate, could justify the prolongation of leave or absence. Any 'irregularity' in such a certificate would be extremely dangerous for the physician as well as for the patient.

This same laborer on leave of absence was ready to do anything, including committing suicide, to escape the misery of slavery in Germany. He became the first volunteer to receive an injection of *Proteus* OX-19 suspension. He and the physician were fully aware of the danger if the Germans discovered the experiment. The volunteer was also informed that he would be the first to get the injection and, in spite of theoretical safety, some unpredicted reaction could occur.

This laborer received the first intramuscular injection of 1 cc of laboratory suspension of *Proteus* OX-19 (administered by Dr. Matulewicz. The Weil-Felix reaction was found to be positive with a titer of 1:500. This person's blood was then mailed to the German State laboratory at once, and soon the telegram arrived with an official result: "Weil-Felix positive." (6)

The telegram was presented to local German authorities, and the volunteer was officially released from his duties in Germany. In addition, he and all of his family in contact with him were excluded from future detention. The Germans were afraid of transferring "infected" lice during the incubation period.

It immediately became clear (to Dr. Lazowski) that the artificial Weil-Felix could be used as a form of defense against the policies of the German occupation government. In top secrecy, we started to inject selected patients with any suggestion of symptoms to epidemic typhus with a suspension of *Proteus* OX-19 as "protein stimulation therapy."

Intramuscular injections of protein suspension were widely used during the last decade before World War II. It was believed that in this way, one could stimulate the general immunological resistance of the patient. Autohemotherapy, some vaccines, and even special pharmaceutical preparations (e.g., Omnadin) were used. So we also used our suspension of killed *Proteus* as a vaccine to build up general immunological resistance.

The number of injections and cases were strictly controlled by us according to classic general rules of epidemics—increasing during the winter, diminishing during the spring, and increasing again in the fall.

More and more positive Weil-Felix reactions were reported by German-controlled laboratories to German authorities and confirmed by our reports. Soon the number of reported cases was sufficiently large to declare the area of our practice (about a dozen villages) an "epidemic area," with relative freedom from oppression.

After one year, one of us (Dr. Matulewicz) moved away from the area. The "private immunological war" was continued (by Dr. Lazowski) at an enormous risk for the next two years. During this period, a medical detachment of the German army made an inspection of our "epidemic area" on the basis of information supplied by a collaborator. The greatest danger (for Dr. Lazowski) was the actual clinical examination of patients by German doctors. The logical assumption for the Germans was that a Polish physician could use the blood from one typhus patient for many other reported cases. However, fearing infestation by "infected lice," the Germans limited themselves to taking samples for Weil-Felix reaction only in their own special laboratories. Their findings, of course, were positive because the reaction was a true biological one, created by an artificial method, not previously known.

Our "private immunological war" gave us a deep

satisfaction because we knew that we had saved the lives of people who would otherwise have been killed, simply because they were Jews or Poles.

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## **BUMED SITREP**

#### PROJECT REEP

The Chief of Naval Operations stated that retention of personnel is his number one goal. To assist the CNO in achieving that goal, the Medical Department published BUMED Instruction 1000.2 on 29 Feb 1980. The instruction implements Project REEP (Retain Each Eligible Person); BUMED's retention program which is applicable to each member of the Medical Department. Project REEP addresses the following goals that need improvement:

- · Honesty/Integrity of Recruiting Programs
- · Quality of Orientation Programs
- Sponsor Program
- · Retention Counseling
- Communication
- · Career Planning and Assignments
- Interface with Navy/Marine Corps Line
- · Recognition of Personnel
- Quality Administrative Support
- · Duties Out of Specialty
- Ancillary Support

All Medical Department personnel are required to implement this instruction and commanding officers must submit a quarterly report to BUMED (MED 02) in the prescribed format. This report provides

BUMED personnel with the information needed to assist commanding officers in achieving their retention goals.

Each senior Medical Department leader is asked to support fully the requirements and suggestions of Project REEP. The results will be improved retention, increasingly higher morale, and a stable and highly professional Medical Department.

#### U.S. NAVY MEDICINE MAGAZINE

Several activities have reported that they are not receiving copies of *U.S. Navy Medicine* on a timely basis. Some problems originate at the Naval Publications and Forms Center, Philadelphia, the central distributer. That situation is now being corrected. To insure delivery locally, commanders are urged to monitor their activity's mailrooms. *U.S. Navy Medicine* is to be distributed, one copy for each Medical, Dental, Medical Service, and Nurse Corps officer and one copy for every 10 enlisted Medical Department members. For BUMED to determine the efficacy of new controls and distribution from Philadelphia, each activity should notify via phone or letter BUMED (MED 001D) upon receipt of the March and April issues. Autovon 294-4253.

## **NOTES & ANNOUNCEMENTS**

#### IN MEMORIAM

CAPT James Lawrence Glass, MC, USNR, who was a member of the surgical staff at NRMC Jacksonville, Fla., died 5 March 1980, while on leave in Idaho.

A native of Memphis, Tenn., Dr. Glass entered the Navy in 1955 as an intern at the Naval Hospital Philadelphia, Pa. He then received his general surgery training as a resident at Naval Hospital San Diego, Calif

After a brief tour of duty at Naval Hospital Memphis, Tenn., he returned to San Diego as a thoracic surgical resident until 1960, when he was deployed aboard USS Repose (AH-16) off the coast of Vietnam. He then served as a thoracic surgeon at Oakland Naval Hospital and NRMC Camp Pendleton, Calif., where he left the Navy and pursued a career as a civilian cardiac surgeon in San Diego until 1979. He returned to active duty and was stationed at NRMC Jacksonville.

Dr. Glass was a member of the American Medical Association, the California Medical Association, and was certified by the American Board of Surgery, American Board of Thoracic Surgery, American College of Chest Physicians, and the American College of Cardiology. He was awarded the Navy Unit Commendation, National Defense Service Medal, Vietnam Service Medal, and the Republic of Vietnam Campaign Medal.

#### MSC OFFICER SURVEY

This May, Medical Service Corps officers will have an opportunity to participate in a Corps-wide survey of attitudes, opinions, and perceptions about their jobs, their professions, their roles as officers, and their naval service careers in general. The purpose of the survey is to develop information for use in career planning, development, and counseling with MSC officers of all specialties.

Effective career planning requires that we meet organizational requirements. The definition and logic of those requirements is currently a matter of review by the Medical Service Corps Division, BUMED through various billet analyses. But effective career planning also requires that we know something about the needs, aspirations, and values of the organizational members —our MSC officers in this instance. Consequently, your thoughts about career matters are not only of interest to

Medical Department planners; they are vital. Your participation in the forthcoming survey, therefore, is of the greatest importance.

Should you have questions about the study, the coprincipal investigators can serve as points of contact. They are LCDR Paul T. Bruder, MSC, USN, Naval School of Health Sciences, Bethesda, Md. (Autovon: 295-1467) and LT Mark Butler, MSC, USN, Naval Health Research Center, San Diego, Calif. (Autovon: 933-2061).

#### MSC FULL-TIME TRAINING AT USUHS

MSC officers who are considering full-time training for FY81 are beginning to get their requests in order and making application for admission to one or more institutions of higher learning. Officers interested in pursuing master's or doctoral studies in anatomy, biochemistry, medical psychology, microbiology, pharmacology, or physiology are invited to explore those programs offered by the Uniformed Services University of the Health Sciences (USUHS). The USUHS offers unique graduate and postgraduate opportunities. This not only stems from its affiliation with NNMC, Walter Reed Army Medical Center, the National Institutes of Health, the National Library of Medicine, the Armed Forces Institute of Pathology, and the Armed Forces Radiology Research Institute, but also from its emphasis on the support role of health sciences in the military environment.

Requests for further information should be addressed to: Dr. John W. Bullard, Assistant Dean for Graduate Education, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Md. 20014.

#### WANTED-ARTICLES AND PHOTOS

U.S. Navy Medicine has always encouraged our readers to submit articles in the areas of their expertise or experience. We are especially looking for articles relating to medical or dental research topics, surgical procedures, and office treatment techniques in any dental or medical specialty. We would also like good black and white photos to accompany those manuscripts.

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